

NEWSLETTER

AUTUMN 1998

From the President



Peter Latham, immediate past President hands over the badge of office to Dr. Richard Murphy.

t is an honour and a considerable responsibility to be elected President of the Institute of Wood Science. The education and training role that the institute provides through its Certificate and Associate courses is a vital one. In particular, the opportunity that this provides for individuals to progress their knowledge and qualifications is essential for both the sense of personal achievement given and for development of a commitment to professionalism in the industry. The Institute is also active in recognising high levels of achievement in the industry and/or in academic work through its Member and Fellow titles. During my time as a member I have always especially valued and enjoyed the Institute for its function in disseminating information and ideas about all aspects of the timber trade. This probably stems from my background in wood science research and teaching at Imperial College, London but alongside this has been the tremendously rewarding experience of learning about all aspects of the timber trade from other Institute members.

The branch meetings and the Annual National Conference stand out as excellent opportunities to inform oneself of current developments in timber research and commerce, to learn about aspects of historical or cultural interest, to make unique site visits, and, not least, to meet others with the similar enthusiasm for this fascinating material. I can honestly say that I have not been to a Branch meeting as either speaker or a spectator at which I have not found something to enjoy and learn from, and my only regret is that one cannot always attend all the events of one's local branch.

All the years are important for the Institute and I am concious of the responsibility to carry on the work of distinguished past Presidents. I would like especially to record my thanks and those of all Institute members to the immediate past President, Peter Latham. Peter carried out the role of President in an exemplary fashion, inspiring confidence in the direction of the Institute and entertaining us in lighter moments with his ready wit and humour. He will be a hard act to follow and I am especially pleased that he will remain active on a working party which is reporting to Council and the Membership on the plans for the future development of the Institute. I am also looking forward to working with our Head Office team; Maurice Holloway (Director), Freda Robinson (Secretary) and David Woodbridge (Editor and CPD Officer) who play a key role in translating into action so much of the Institute's work.

The IWSc is in good shape at the present time and I can promise that we are looking to the future and ways to enhance our role for all our members in the timber industry in the more specialist fields of Wood Science and Technology.

The Annual Conference and Study Day 2nd - 4th April 1998 - Ireland.

The 1998 Conference pioneered a number of firsts as we moved out into Europe and extended our horizons across the seas, albeit the Irish Channel. For many though, this was seen as a move into unmapped territories. We need not have concerned ourselves as we were made more than welcome by the Committee members of the Ireland Branch and the enthusiasm of their Chairman, Dr. Jos Evertsen.

The plan to have a study tour on the day preceding the conference provided those attending with the opportunity to enjoy the beauties of the Irish countryside and an insight into two important sectors of their timber industry, namely forestry and MDF manufacture. The visits to Avondale House, Coillte (Irish State Forestry Board) offices at Newtownmountkennedy and

the impressive MDF plant of Willamette Europe at Clonmel, were however punctuated by a number of unscheduled stops by the coach. True to form Institute members were eager to assist in the diagnosis of engine faults! With the study day held on Thursday the Ireland Branch introduced a further departure from the norm by setting the Conference day for Friday.

Held centrally in Dublin at the comfortable Gresham Hotel the conference provided insight into many of the activities related to forestry and the timber industries which gave a clearer understanding of the breadth and value of timber to the Irish economy. This does not mean that other areas of the world were ignored, with papers from England, The Netherlands and Finland The programme was varied enough to address subjects ranging from Forestry, through the use of timber and the infrastructure that supports it, to the implications of modern technology in the form of the computer and

CORPORATE MEMBERS

The Council of Management wish to record their thanks to those listed below for their support as Corporate Members:

ACWI Ltd Anglo-Norden Ltd John Boddy Timber Ltd Boulton & Paul Ltd BSW Timber plc Buckinghamshire University College Richard Burbidge Ltd Carver (Wolverhampton) Ltd COFI Coillte Cuprinol Ltd Enterprise Ireland Forest Services N. Ireland HicksonTimber Products Ltd Howarth Timber Group Itd Hunter Timber Group Ltd James Jones & Sons Ltd T. P. Jordeson & Co. Ltd Kotka College James Latham blc Marlow & Co. Ltd MBM Forest Products Ltd Meyer International plc Premdor Crosby Ltd Price & Pierce Ltd Protim Solignum Ltd Rentokil Ltd **Timber Trade Federation** Timber Trades Journal Timbmet Ltd TRADA Travis Perkins blc Henry Venables Ltd Willamette Europe Ltd

its influence on how the timber industry needs to keep abreast with new technologies and techniques.

Another first was the inclusion of posters of research presented by students. This proved a success and the Ireland Branch instituted a prize for the two posters judged to be most worthy. It gave opportunity for young people to show their understanding of timber and encouraged us in realising that there is an enthusiastic generation developing.

On the Saturday a planned golf tournament was cancelled due to heavy rain but a guided tour of historic Dublin was enjoyed by several Institute members.

The verdict must be that the conference was a huge success and could lead us into more exotic venues in the future. But for 1999 we can look forward to seeing you and enjoying the Conference in the Lake District.

Australian Branch - The First 25 Years

Bill Keating was inaugural Australian Branch Secretary and Branch Chairman from 1985 to 1989. Currently Editor of the Wood Science Digest and Secretary of the J. W. GOTTSTEIN Memorial Trust Fund.

For more than 100 years wood science has been a prominent field of study in Australia as the properties of a multitude of 'new' species were investigated. A major stimulus to the discipline was received when the Division of Forest Products (DFP) of the then Council for Scientific and Industrial Research (CSIR) was established in 1928. By the 1950's there existed in the country a sizeable group of wood scientists. The formation of the Institute of Wood Science in the United Kingdom in 1955 provided them with the opportunity to make contact internationally with those of like interests. In August 1971 Professor Eric Gibson, then Vice-President of the Institute and Director of the Princes Risborough Forest Products Laboratory, gave a talk at DFP encouraging the formation of an Australian Branch of the Institute. The idea was pursued with enthusiasm and the Australian Branch was launched by its first formal committee in 1973 with Dr. Ted Hillis as the inaugural Chairman.

The decision by the committee to invite Professor Ovington, the then Head of Department of Forestry, Australian National University to be the first quest speaker set the pattern for future events as did his subject matter. His talk entitled The Increasing Need for Wood Science in the Forest Products Industry' contained many ideas that hit home to the large Audience. At about this time Dr. Hillis was active on **IUFRO** Committees and had many contacts with wood scientists around the world, many of whom were encouraged to speak at Branch functions during their Australian visits. Since those early days the trend has continued with many of the world's leading wood scientists giving us the benefit of their experience. Special mention must be made of the visit by Professor R. (Bob) W. Kennedy in August 1982. This was a lecture tour organised and underwritten by the Branch during which Professor Kennedy was the quest speaker at eleven functions in five States over only seventeen days. His main theme was 'The Interaction between Research and Industry in Forest Products.' Professor Kennedy was at the time Professor of Forestry at the University of British Columbia, Vancouver. The value of this visit was substantial. We are sure that the ideas put forward by a world renowned wood scientist to such a large, diverse audience had a lasting influence.

While overseas speakers, of necessity, tend to attract the limelight we always realised that there were many Australian based timber technologists and leading practitioners to encourage to address our meetings. Subject areas have included education, housing, panel products, furniture, adhesives, preservation, high temperature drying, engineering and various aspects of timber utilisation.

A shared interest in timber is expected when the Branch presents joint meetings with

other professional bodies such as Foresters, Institution of Engineers, Timber Structures Institute and the Gottstein Trust. As well as providing a valuable forum for the presenttion of information and the exchange of ideas, the Branch arranged several threeday timber technology courses for people employed in the forest products industry. Approximately 400 participants in five States completed the course.

Education has naturally been the focus of our activities both formal and informal. On the formal side, the Branch was closely involved in the development of a national timber technology curriculum that was accepted by the Institute on completion as meeting the requirements of the Certificate Member category. The late Mr. Bernard Eades and Dr. John Brazier were very helpful in these negotiations. The curriculum was successfully introduced into the Australian TAFE (Technical and Further Education) system. At the tertiary level the Branch provided a prize each year to the top student in wood science at three institutions.

A Branch initiative that has given us much satisfaction is the S.A. Clarke Memorial Medal Award. This is given biennially to recognise people who have made a significant contribution to the more efficient utilisation of wood in Australia. To date seven persons have been so honoured. Mr. S.A. Clarke was a renowned CSIRO scientist and Chief of the former Division of Forest Products from 1944 to 1960.

A successful move that started in our first year, 1973, was to issue invitations to private firms, government departments, trade associations and individuals to become Patrons. Those who accepted agreed to make an annual financial contribution to support the aims and activities of the Branch. By this injection of funds we were able to establish and to maintain our Wood Science Digest. This is published three times each year and serves as the main avenue of communication within the Branch and elsewhere. It can now be accessed through the Branch Home Page on the internet! (http://www.wark.csiro.au/woodsci/woodinst.htm)

A fairly recent development is that the Branch has been invited to join an international Association of Wood Products Societies operating in the Pacific Rim region. At the first meeting, held recently in Tokyo, papers were presented on timber research and utilisation in the different Pacific Rim countries including one by the current Australian Branch Chairman, Dr. Harry Greaves.

Co-operation and assistance has always been forthcoming from CSIRO Divisions of Forestry and Forest Products and Building, Construction and Engineering, the main government bodies concerned with forest products and building research. A large proportion of our members belong to, or are former officers of, these organisations.

Most of our meetings are held at the CSIRO forest laboratories in Clayton, a suburb of Melbourne. In the 1970s and 1980s the Branch Committee of the day spent considerable time and effort preparing and presenting submissions to a series of official enquiries into the future of forest products research in Australia. What influences these had is hard to say.

The concentration of our activities in Melbourne, where the majority of the 220 members listed on our database are, is a cause of some concern. We have organised functions outside Victoria with the assistance of local members but it is difficult. Arranging a function in Perth is like someone in London trying to do something similar in a location as far away as Athens or Helsinki. At least we have no language problems! Outside Melbourne the remaining membership is rather thinly spread around this large country. Non members are always welcomed at Branch functions. We also have ten overseas members. New applicants are assessed by a membership sub-committee that then passes on recommendations regarding the appropriate classification to the U.K. headquarters of the Institute.

The links between the Australian Branch and the U.K. have generally been very good, especially when backed up by personal contact. It is difficult to single out individuals but the late Jack Bick whose wise counsel in our early days was invaluable particularly after his visit to Australia. Also Professor John Levy has represented us on IWSc Management Council most effectively.

Twenty five years is a good time to reminisce but we must look forward. Our present Chairman, Dr. Harry Greaves and the Institute Director, Maurice Holloway, have a good rapport which augers well.

The Gottstein Trust.

The Joseph William Gottstein Memorial Trust Fund was established in 1971 as a national education Trust for the benefit of Australia's forest products industries. The purpose of the Fund is "To create opportunities for selected persons to acquire knowledge which will promote the interests of Australian industries which use forest products for the production of sawn timber, plywood, composite wood, pulp and paper and similar derived products."

Bill Gottstein was an outstanding forest products research scientist working with the Division of Forest Products of the Commonwealth Scientific Industrial Research Organisation (CSIRO) when tragically he was killed in 1971 photographing a tree felling operation in New Guinea. He was held in such high esteem by the industry that he had assisted for many years, that substantial financial support to establish an Educational Trust Fund to perpetuate his name was promptly forthcoming.

Since its formation the Trust has awarded more than 60 Fellowships to help persons in the forest products industries.

Lakes...Mountains...Fun...Sailing... THE IWSc CONFERENCE 1999

Following a very successful and enjoyable conference in Dublin last April, our flagship event returns across the water from Ireland to the very heart of the Lake District. The Low Wood Hotel will be the home of the conference during the weekend of 16th to 18th April 1999, and is situated on the shore of Lake Windermere (England's largest lake) with beautiful views out over the lake to the rugged fells of the Lake District behind.

Full details of the speaker programme will be announced shortly, but we are pleased to outline our provisional programme for the conference so far. It includes:

- A senior industry figure from one of the largest Nordic forest poducts companies, who will be speaking on the many important strategic and structural changes that our industry is currently undergoing.
- Tom Moat of Headline Communications will be speaking on "Getting Your Message Across" - a vital skill in modern business and one that is so important to our industry.
- Duncan Pollard of Scottish Woodlands will be addressing many vital issues in the UK timber producing industry with his paper "Trees, Timber, Technology -The Marketing Challenge in the UK".

We also return to the issues facing purchasers and consumers of our industry's end products with a paper from one of the UK's leading house builders on timber products and industry developments – an excellent opportunity to come and hear from the horse's mouth what is expected from all of us! It is particularly nice to welcome as speaker our past president Dr Martin Ansell who will be presenting a paper on timber engineering. The full programme of speakers and events will be available in brochure form, complete with enrolment details. This will be circulated early in the new year.

One innovation at this year's Dublin Conference which was well received - The study tour on the Friday prior to the main conference, will be retained in 1999. A forest and processing industry tour of the lake district is currently being finalised. This will be an excellent opportunity for people at all levels in our industry from trainees to managers who work directly with those who use timber and timber products to see UK timber production and primary processing first hand.

Since our present conference format was launched in York, many people have said how much they have enjoyed the social aspects of the event. Next year's conference at the Low Wood Hotel, builds on the excellent conferences since York and provides a picturesque setting in which to relax and unwind, a venue where delegates, partners and families will be made very welcome and a range of activities will be on hand to suit everyone.

For example in an action packed weekend, you could enjoy the excellent and very well equipped leisure club with its fun pool and sauna, steam room and very well appointed gym. Alternatively, you could take a seat aboard our Lake District tour of interesting sites, take a sailing lesson on Lake Windermere, learn how to ride a horse, or take part in many of the other activities that will be available!

In 1999 the President's reception returns to the Water! with a Lake Windermere cruise aboard the m.v. Swan. A live jazz band will play in the background and the traditional welcoming drink will help to ensure that all thoroughly enjoy this important social event amidst the spectacular scenery that surrounds the lake.

In these days of increased stress, fast living, and tight budgets, every effort is being made to ensure that delegates, their partners and families gain maximum enjoyment and value for money from the weekend. Take a step back from the day to day pressures and strains of work, book the date in your diary and look forward to an enjoyable weekend where you will be able to listen to interesting papers delivered by leaders in their field, network, explore and exchange ideas. Take full advantage of the very wide ranging facilities available, and above all, relax!

Exhibition Stands at the Conference

The Gallery outside the main conference hall will be given over to space for companies and organisations who wish to have an exhibition stand at the conference. Space for stands has been allocated in a key area where there will be constant traffic of delegates right through the main conference day, from the registration of day delegates on the Saturday morning to the drinks reception prior to the Gala Dinner and the dinner itself. Coffee and tea in the conference breaks during the day will also be taken in the Gallery Exhibition area. Prices for stand space are very modest - £100 plus VAT. Due to the low price, stand space is already being booked, with three confirmed bookings so far. If you are interested in taking a stand at the Conference please contact Dave Carney Mobile: (0660) 388132 E-mail DaveCarnev@compuserve.com. 139 Springvale Road Sheffield S6 3NT.

Dave Carney - Conference Committee



Hardwood External Doors - A Joinery Consultant's Nightmare

Ron Vickerstaff AIWSc

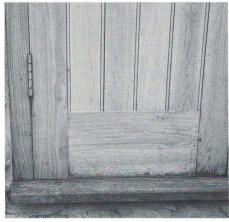
The work of a joinery consultant is, on the whole, a pleasurable and rewarding occupation. The work is concerned with the promotion of the correct use of wood. helping Clients in the choice of suitable materials and assisting with the designs, construction and costings. This becomes a labour of love when working on period, historic or listed buildings. Nevertheless, there are downsides which can be accepted as temporary blips provided that they are infrequent. When certain problems re-occur with depressing regularity, like an evil spell, a consultant is called in to perform some sort of exorcism. A prayer to the divine does not help, a solution can only be achieved by patient exploration and education. What started as odd incidents, has within a decade, turned into an epidemic of complaints regarding hardwood external doors and their failure to perform.

Scenario

Hardwood external doors have been used on domestic properties for many years and the pre-war British joinery catalogues illustrate ranges of such doors. They were generally manufactured in oak, expensive and designed for use on individual high class properties. During the 1970's the joinery manufacturing industry began to produce a more economically priced range of standard size tropical hardwood doors to meet a growing demand in home improvements. The timbers used included iroko and Brazilian mahogany. A decade later these doors were being more extensively used on new-build housing schemes

Any expanding market soon attracts the peripheral parasites and the market was flooded with very low priced imported doors from the Far East. The quality of these doors varied greatly, fairly good manufactured from dark red lauan / meranti to cheap and nasty in a mixture of somewhat questionable species. All the doors were sold under the general mantle of 'mahogany', with the paler woods given a coat of base stain to falsely enhance their colour. Complaints about the doors also related to poor design, poor workmanship and finish. As the market increased further ranges were being imported from Spain, Portugal and Brazil. The problems of movement after fitting, due to the very low moisture content (sometimes 6% or less) experienced in imported hardwood doors did not help the situation.

In fairness it must be said that the overall quality of both home produced and imported doors has improved immeasurably in recent years. To counter movement problems one exporter now reduces the normal 16 - 18% moisture content by a further 2% for deliveries during the mid-summer period.



Water Penetration and staining through un-sealed end grain on bottom edge of door.

Over the years survey reports have been requested from both suppliers and house owners. The first thing to establish is the condition of the product at time of delivery. A visit to the stores of the manufacturer or stockist to inspect doors of similar production and patterns will reveal:-

- 1) The species of timber used
- 2) Average moisture content
- 3) Product quality
- 4) Methods of storage and handling.

This inspection should provide an indication as to whether the doors were 'fit for the purpose' at time of delivery.

Once delivered to site though, one must endeavour to ascertain how the doors were stored and for how long before being fitted. On contract housing sites this is very often a vital factor and the root cause of many problems. Because of the need for site security, doors are often stored in locked steel containers. The temperature within these containers can fluctuate wildly and during prolonged sunny spells have been recorded as high as 140° F. This can have a dramatic and highly undesirable affect on the moisture content – which may already be on the low side. (See above). It seems pointless for material suppliers to adhere to strict kiln schedules to avoid



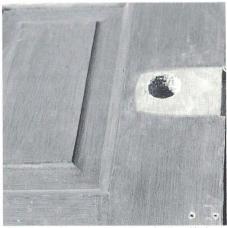
Open joint between middle rail and stile, due to expansion of panels which had been dried to a moisture content too low for intended use.

degrade and then subject the manufactured product to such abuse.

The speed of house completions and hand over only compound the problems. Doors are taken from store to be fitted into properties which are still saturated by the wet trades, blockwork, plaster and screeds. Timber doors subjected to such extremes can only result in extreme moisture related reactions, not the least being dimensional change.

The dimensional changes are obvious but the deterioration in mechanical strength of the joints is not so readily appreciated. It little matters if the joints are assembled with M.R. or W.B.P. adhesive, it is the dimensional changes in the wood that causes the breakdown in adhesion and allows the joints to open when the stiles distort. Where raised and fielded panels are incorporated the distortion is greater, the thermal panels absorb the moisture at a faster rate and expand tight within the grooves exerting greater pressure on the already weakened joints.

Even doors which are at an acceptable 16 - 18 % moisture content when fitted under similar conditions will still be subjected to dimensional changes but to a lesser extent and thus a reduced incidence of mechanical failure at the joints.



Door that had been hung and fitted in 'the white' and painted after ironmongery was in place.

Further problems are created when fitting doors which require a reduction in height. Door frames to suit a standard 2000 - 900 module which are constructed to BS / BWF standard joinery sections, result in a tight rebate size of 1994 x 806. The standard metric door size produced by most manufacturers is 2000 x 807. It is also popular today for the frames to be fitted with an aluminium stormquard threshold which, according to the pattern used, reduce to opening by 25 -32mm. Taking the worst situation we find that 1994 minus 32mm and 5mm for door clearance = 1957 which results in a reduction of 43mm in the door height. The correct procedure would be to remove equal amounts from the

top and bottom rails. Unfortunately only too often the required reduction is taken off the bottom rail only. This procedure removes all the haunching off the bottom rail and completely destroys the integrity of the joints. Furthermore, if the doors are constructed from a treated non-durable hardwood this removes, as does any substantial trimming, the envelope of preservative treatment and with it the intended protection against decay.

One other very common error is the fitting of mortice locks into the tenons of the middle rails, this cuts away all the mechanical



A mortice to receive a lock case which has all but destroyed the integrity of the joint between the stile and middle rail.

strength and induces the stile to bow and leave a wide open joint.

Many of the modern designs of hardwood doors incorporate raised and fielded panels. These are designed to float within the grooves in the stiles and rails with a clearance allowed in depth of the grooves to allow for movement during the normal changes in climate conditions. The massive amount of movement experienced during the extraordinary conditions described earlier results in two common failures.

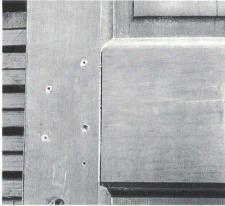
- (a) The panels jam tight within the grooves and cannot swell to the full extent and become 'compression set', when dried out to natural conditions the panels are reduced to a width less than the original and leave a stripe of undercoated or bare wood.
- **(b)** The panels are gripped so tightly within the groove that the panel splits to relieve drying stresses.

Often when checking the moisture content of doors on site, the highest reading is taken at the middle rail when the upper panels are glazed. This is due to faulty painting and glazing. Even where doors have been basecoated the loose pinned beads are not removed, consequently the rebates and backs of the beads are left untouched. Glazing specifications call for these areas to be sealed. It is a rare exception to find glazing carried out to a fully comprehensive specification. The back bedding is either hit and miss or so highly compressed as to be almost non-existent and glazing beads are not bedded but pinned in dry and very often

at irregular centres. This can cause the beads to distort and in so doing allow free entry of water from inside and out, whether it be from rain or internal condensation. Dire results are bound to occur. The methods of decoration also contribute to many of the problems. All specifications call for a full system finish to both sides and all edges, but this very rarely happens.

A mirror will reveal that the top and bottom edges are very often left clean after fitting or have been treated with a basecoat only. In many instances the external face has been decorated with the internal face left for decoration on completion of internal works. Is it any wonder that with such imbalance distortion and water staining is experienced.

If some of these observations may seem bizarre, but true, so too can some of the on-site efforts to repair the 'inflicted' damage.



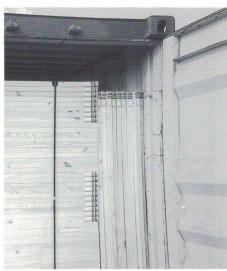
A crude attempt to rectify an open joint

Conclusion

Site inspections reveal the odd incidence of a faulty component or poor manufacture, these doors are, after all, mass produced items and there can always be the occasional reject. The vast majority of problems that do arrive are the result of site abuse.

There have been numerous publications regarding the method of handling doors on site, one of the earliest being BWF Doors Information Sheet No. 2 of May 1980. Later there were the more explicit 'Care of Timber Doors on Site' dated October 1993 and the TRADE Viewpoint 'External Doors'. Supplement No. 4 dated June 1993. Many door manufacturers also print in their catalogues clear instructions for fitting and protection. Not only are the recommendations in these reports being totally ignored, hardly anyone admits to having read them. One factor has been very noticeable, the greatest number of complaints regarding the performance of hardwood doors are received from the larger sites for contract housing, as opposed to the private developer. Where the private developer is concerned, this apparent phenomena can probably be accounted for in a number of ways:-

- a) Doors taken in smaller quantities and stored for a shorter length of time.
- b) Far more stringent site control and a



Timber doors packed in the potential heat trap of an enclosed steel container.

reputation to uphold

- Greater continuity of reliable subcontractors
- d) A slower completion and hand over rate, which allows for better drying out periods for the wet trades.

Contract housing on the other hand is all based on highly competitive tendering, each sub-contract trade working individually. When questioned the response is always the same, 'that's not my job' or 'l am not paid to do that', consequently there is no liaison between the joiner and decorator. Everything is down to a price and quality suffers.

There appears to be a deplorable lack of available site skills which becomes more apparent when inspecting doors manufactured from the denser tropical hardwoods, or those with interlocked grain that can present problems with surface finish. Nevertheless most surfaces can be brought to a good clean finish provided cutters are kept sharpened, and the operative understands the basics of "working with the grain".

Some of the workmanship is so rough that it is totally unacceptable. Some suppliers offer a service for extras such as reduction in height, rebate for weather bar, slot for letter plate and mortice for locks. These operations, when undertaken in the factory, result in a far better product.

One possible solution to the problem would be for sites to adopt more of the continental system of factory finished door sets. Doors are fitted into frames complete with all glazing ironmongerys and decoration. These would be fitted after properties were completely dried out, dummies being used during construction.

The initial reaction would be the 'far too expensive'. As with any product you get what you pay for and cheap can be expensive in the longer term.

Photographs provided by the Author, Brian Keyworth and David Woodbridge.

HOT OFF THE PRESS



Martin Annis receiving the first prize for top marks in the IWSc Certificate Examination 1997/98 from the President, Peter Latham

EMB Product Standard on Light and Ultra Light MDF now available

By Eike Gehrts, Technical Manager, Euro MDF Board, Giessen, Germany

After having recently published its product standard on "HDF for Laminated and Veneered Flooring", Euro MDF Board, (EMB), the European Association of Medium Density Fibreboard Manufacturers has "added on" with the publication of a similar document for "Light-MDF and Ultra-Light MDF ". Thus, account is taken of the trend towards the utilisation of lighter versions of MDF for specific applications on the European market.

Its relatively high density - about 750kg/m3 at 19mm panel thickness - had limited the applicability of MDF for specific uses in furniture manufacturing from the very beginning. Nevertheless, the light and ultralight varieties of MDF which were already well-known and appreciated in the Asia-Pacific region were accepted in the European

market only after the higher density varieties - see the above reference to EMB Product Standard for HDF - had witnessed preferential development.

Areas of application of "Light - MDF" (Density about 550 kg/m³ to \geq 650 kg/m³) are besides furniture manufacturing -in particular wall and ceiling panelling. However, specially-developed moisture resistant light MDF has also been used in underroof construction. "Ultra-light MDF" (Density \geq 450 kg/m³ to about 550 kg/m³) arepreferred for uses such as mouldings and picture frames, but are also used for purposes of thermal insulation.

Copies of this Product Standard ("Requirements for Light-MDF and Ultra-Light MDF") are available from the EMB office (Wilhelmstr. 25, D-35392 Giessen, Fax+49.641.72145, e-mail: info@euro-mdf.org) in English or German, against pre-payment, preferably by a crossed Eurocheque issued in German currency, at a price of DM 30,00 per copy, plus postage, bank expenses and packaging for overseas orders.

Giessen, July 1998

Timber Trade Training Association Services

Jim Lumsden, formerly Human Resource Director for Meyer Forest Products has joined the Timber Trade Training Association as Director of Training. In the past, trainees on TTTA schemes have progressed onto the IWSc courses.

It is hoped that, with Jim as Training Director, the links between the TITA and the Institute will be developed further.

Jim is to be invited onto the Education Committee.

BUCKINGHAMSHIRE CHILTERNS UNIVERSITY COLLEGE

Many in the timber trade have successfully completed the Certificate and Associate level courses arranged by the Institute of Wood Science. There are very few relevant training opportunities beyond these. Consequently, in partnership with the Institute, the Buckinghamshire Chilterns University College has made provision for holders of the Certificate award of the Institute to be considered for entry directly into the second level of the BSc (Hons) Forest Products Technology on a full time mode of delivery. There is also provision for the holder of the Associate award to be considered for entry directly into the third level of the BSc course. In both cases the acceptance of a student will be decided at an interview conducted by the University.

These measures will provide the opportunity for completion of the BSc (Hons) Forest Products Technology with only one or two full years attendance at the University. This new development gives the Institute's courses an academic status in addition to the long standing vocational value recognised throughout the timber related industries.

For further information on the BSc (Hons) Forest Products Technology contact : Alison Heath on 01494 605073.

CPD (Continuing Professional Development)

A few years have gone by since inception of

Keith Purcell FIWSC

CPD. Our general membership should not overlook the value of this facility.

Attaching a CPD attendance form to your C.V. can only be of added value.

Much 'Spin' can be attached to a C.V.

Suppliment this with a validated CPD form and it takes it into another league.

It's simple! attend your local meetings and qualify for CPD attendance hours.

At our Liverpool Branch we are aware of one of our members who recently 'clinched' an appointment with the help of their CPD record.

Don't overlook CPD. Attend your local meetings, Its easy to maintain your records. Contact David Woodbridge our CPD Officer for the attendance forms or any additional information.

Note from the Editor:

In order to keep this Newsletter interesting and informative we need your help with articles and photographs.

IWSc Certificate Course: List of Course Providers

Provider / Telephone	Contact/Tutor	Method of delivery	Other Facilities	Associateship Course also Offered	Tuition including IWSc Workbooks & Examination Fee
BCT Morecombe Lancs 01524 832052	Glenn Sharples	4	11	<u>-</u>	11
Buckinghamshire College High Wycombe Bucks 01494 522141	Barry Matthews	4/6	8/9	√	£675.00
Builders Merchants Federation Harlow Essex 01279 439654	Lesley Pritchard	4	7/9	-	£1100.00+VAT
Trevor Green Anglesey 01248 717373	Trevor Green	4/5	8/9	√	£750.00 min 4 Students per group
lsle of Wight College Newport IOW 01983 526631	Martin Wall	2/4	8/9	- 11	£726.00
^c /o IWSc Ireland Branch Dublin (00) 3531 8082635	Dr. Jos Evertsen	4	11	11	11
Leeds College of Building Leeds 0113 222 6009	Paul Carter	3	8/9	✓	11
Liverpool Community College, Liverpool 0151 2524885	Greg Prescott	3	8/9	✓	11
Newtownabbey College, Co Antrim 01232855000	Tom McFadden	11	, 11	- , ·	11
Timber Tectonics Princes Risborough Bucks 01844 343074	David Woodbridge	5/6	9	√	£850.00
TRADA Technology Ltd High Wycombe Bucks (and Rotherham) 01709 720215	Susan Farrow Margot Reeves	4	9	, -	£995.00 + VAT
Warwickshire College Leamington Spa. 01926 318235	(Mrs) I Jones	1	8/9	✓	£693.00

KEY

2. Evening Classes

3. Day release

^{1.} Block Release

^{5.} Distance learning with tutorial support

^{4.} Distance learning with tutorial support at central location

^{7.} Additional Course notes provided.

^{10.} Supply of samples on request

^{6.} Distance learning with tutorial support by/ letter/phone/Fax

^{8.} College based lab and technical equipment available 11. Apply to provider for full details

^{9.} Equipment available for tutorial/workshops

Note: The above details relate to information provided during September 1998 and are intended to provide a general guide. For full details and confirmation of costs please contact the provider of your choice direct.

1998 -1999 BRANCH MEETINGS

At the time of going to print, the following details are available:

SCOTTISH BRANCH Wednesday 30th September

Wednesday 18th November

Wednesday 27th January (or 10th February to be advised) Wednesday 14th April

Wednesday 19th May

INFRPOOL AND DISTRICT BRANCH Wednesday 18th November

Tuesday 9th March

Wednesday 12th May

Monday 17th May

THAMES VALLEY & CHILTERNS BRANCH

Wednesday 16h September

Wednesday 14th October

Wednesday 11th November

Tuesday 15th December

Tuesday 19th January

Saturday 13th February

Saturday 27th February

Saturday 20th March

The CSC Forest Product Ltd Visit Tto OSB Plant Inverness Presentation on Scotland's Canals by British Waterways STEP Stirling. Presentation on Timber Engineering at Napier University, Edinburgh. Presentation on Ecological Design by Julia MaCrae at University of

Abertay Dundee. AGM and visit to James Jones & Sons Ltd, Sawmill at Dumfries All meetings scheduled to start at 13.00.

Supper Evening The World of Antiques

Speaker Sally French-Greenslade Venue: Rowton Hall Hotel, Chester at 18.45 for 19.15

Effluent Treatments in the MDF Industry Speaker: Tony Hackney (Kronospan Ltd)

Village, Nr. Warrington. at 18.30

Termites and Buildings: Assessing the Problem from a non commercial

Venue: Buckinghamshire Chilterns

at 19.30. Timber Frame 2000 site visit

Venue: BRE Large Building Test Facility, Cardington at 14.30.

Wood Identification Night Speaker:m Dr. Mark Irle, Forest Products Research Centre Venue: Buckinghamshire Chilterns University College at 19.30 hrs.

Timber in Harpsichords Speaker: Robert Goble Harpsichord Maker Venue: Trada Technology Ltd

at 19.30.

Speaker: Dr. Kevin Towler Venue: Trada Technology

Visit to Stuart Linford Furniture Factory

Venue: Stuart Linford Kitchener Road,

Visit to Imperial College Speaker: Dr. Richard Murphy Imperial College of

Venue: Department of Biology - Timber Research Group, Imperial College of Science and Technology,

at 10.00. Woodland Visit

Guide: Andy Pratt National Trust Education Warden Venue: Ashridge Estate near Tring Wednesday 21st April

Tuesday 11th May

Bedgebury Pinetum Speaker: Colin Morgan. Bedgebury Pinetum.

Venue: RHM Technology, Lincoln Road, High Wycombe.

at 19.30. Branch AGM and

Timber in Windmills Speaker Chris Wallace Venue: Trada Technology Ltd

LONDON BRANCH

Wednesday 14th October

Tuesday 2nd February

Tuesday 11th May

Friday 5th March

Venue: Bangor University, North Wales

Manufacturing Techniques and End Uses for Laminates

Speaker: Ken Dobbin (Formica Ltd) Venue: Fabricators premises (to be confirmed).

Annual General Meeting

Venue: The Ring O'Bells, Daresbury

viewpoint Speaker: Dr. Robert Verkerk

University College.

Speaker: Geoff Pitts PROMA TIL.

The Role of Timber in Fire Resistant Doorsets

at 19.30.

Guide: Stuart Linford

High Wycombe.

at 09.00.

Science and Technology

Prince Consort Road,

David Woodbridge FIWSc Editor and CPD Officer

at 19.00 (AGM) 19.30 (Presentation)

Joint Visit to BRE Cardington with Thames Valley and

Chiltern Branch (See details above)

Presentaion by Charles Trevor of the Nordic Timber Council

at Department of Biology, Imperial College, Kensington. Joint Visit with the Southern Branch

to Salisbury Cathedral Full details to be announced in

branch diary.

A Seminar and Workshop on Bamboo At Department of Biology Imperial College, Kensington.

Family visit to Rocks East Woodland

Ashwicke, near Coleme, South Gloucestershire

For times of the London Branch meetings - see the Branch diary.

WESTERN COUNTIES BRANCH Sunday 11th October

Sunday 13th December

Tuesday 5th January

Sunday 21st February

Wednesday 17th March

Tuesday 17th November

Stewardship Council Speaker: Rod Nelson of the Soil Association, Bristol.

Venue: Clarks Wood Co. Ltd. Silverthorne Warf, Bristol.

Certification and the Forest

at 19.30

Visit to Longleat Forestry Office Speaker: John McHardy, Head forester

for the Marquess of Bath. Venue: Longleat Forestry office.

Visit to Woodbury Brothers and Haines, Furniture Manufacturers.

Host: John Shiers

Venue: Woodbury Brothers & Haines at 14.30.

Tour of Stourhead Western Estate to cover silviculture, harvesting and forest management issues.

Guide: David Pengelly, Forest Consultant at 11.00.

Visit to Timbmet Ltd, Timber Merchants, Cumnor Hill, Oxford.

at 14.00.

Support your Local Branch and remember that you can attend any other Branch

Meeting too (subject to advice on number restrictions for certain events).

When you attend a meeting, make sure you complete your CPD records!

SOUTHERN BRANCH Thursday 24th September November (Date to be advised)

Friday 5th march

Visit to Calbourne Mill IOW Presentation on Sustainability Issues

Concerning Timber by Terry Colman

Joint visit with London Branch to Salisbury Cathedral meeting time to be advised see Branch Diary

Further meetings are planned on Wooden Boat Building and Musical Instrument making.

These will be announced in the Branch Diary